



**GREEN
WRENCH**

TECHNICAL ASSISTANCE

DEPARTMENT OF ENERGY & ENVIRONMENT

GreenWrench Expansion Project

Clara Elias

Pollution Prevention Coordinator



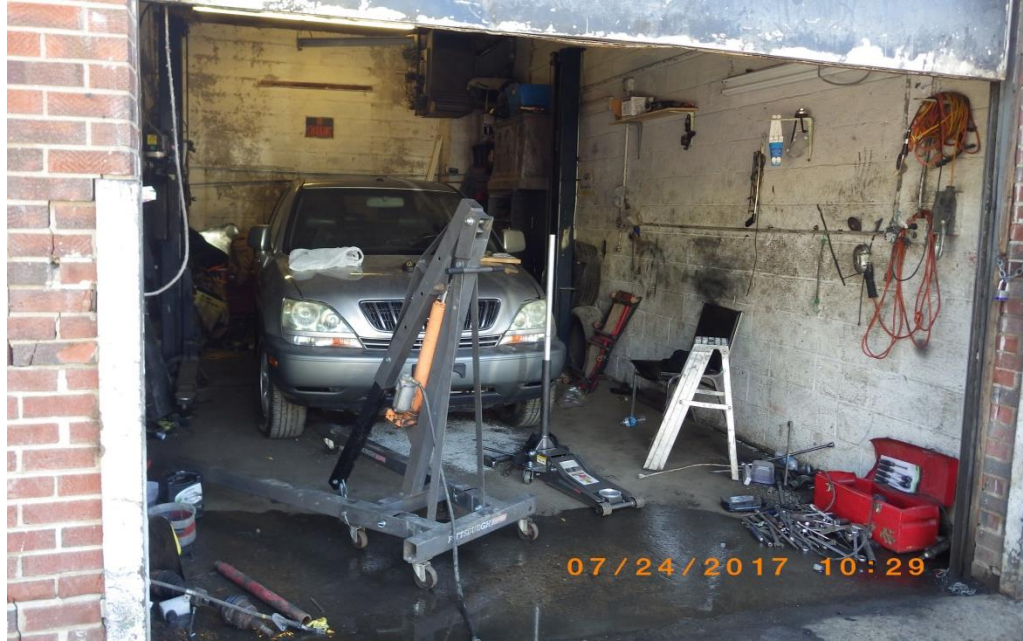
GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR



Stormwater from
2/3 of the
District's auto
shops drain to this
outfall with little
to no treatment



Automotive Repair shops are Critical Sources of Pollution



Why Was GreenWrench Created?

1. Unified Guidance from DOEE
 - a) Environmental Services (air and toxics)
 - b) Natural Resources (stormwater)
 - c) Urban Sustainability
 - d) Energy
2. Provide tools and resources to educate and motivate auto shops
3. Funding from the EPA



EPA Funding

1. 2016-2019: Source Reduction Assistance grant
 - 2 years with 6 month extension and additional funding
 - Develop market strategy
 - Pilot and launch program

2. 2018-2020: Pollution Prevention Grant
 - 2 year grant to expand program
 - Goals: continuity of service, shift culture, and promote use of safer chemical products

Target Audience

- Auto body and repair shops
- Businesses, universities, government, and others
- Small, medium, and large facilities
- Stationary or mobile



Approach

Community-based social marketing

Achieve sustainable behavior with an approach that uses psychology and social marketing



Market Research



Survey

24 conducted in English, Spanish, and Amharic

1. Cold calls
2. Email with digital survey
3. Follow up phone calls after e-mail
4. Pre-scheduled phone calls



In-person

Method	# Surveys
All Calls	10
In-Person	14
Online	0

Results

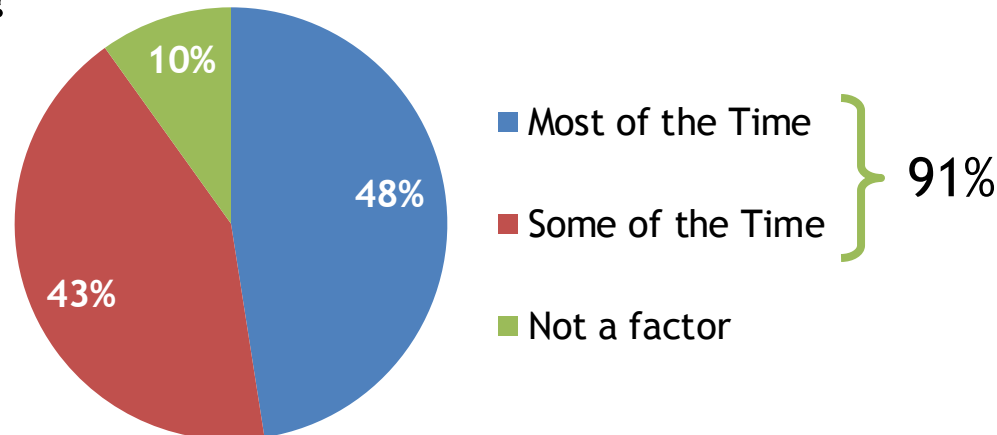
1. Does knowing that your storm drains flow directly to the Anacostia River affect how you think about your work?

48% Yes 52% No

2. Are environmental regulations clear and easy to understand?

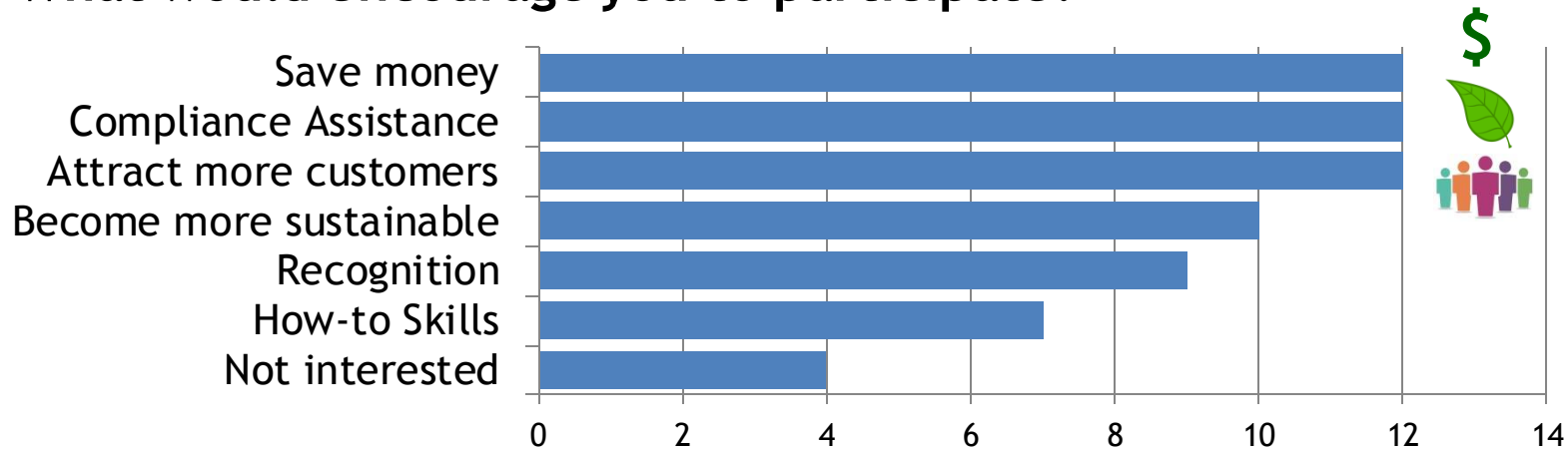
83% Yes 17% No

3. How much do environmental impacts factor into your business decision-making?

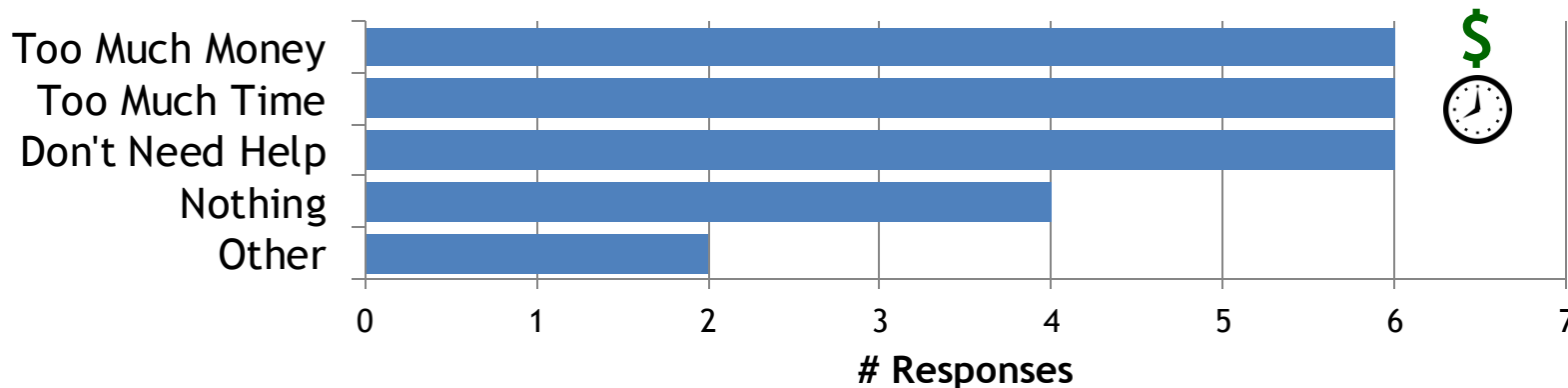


Results

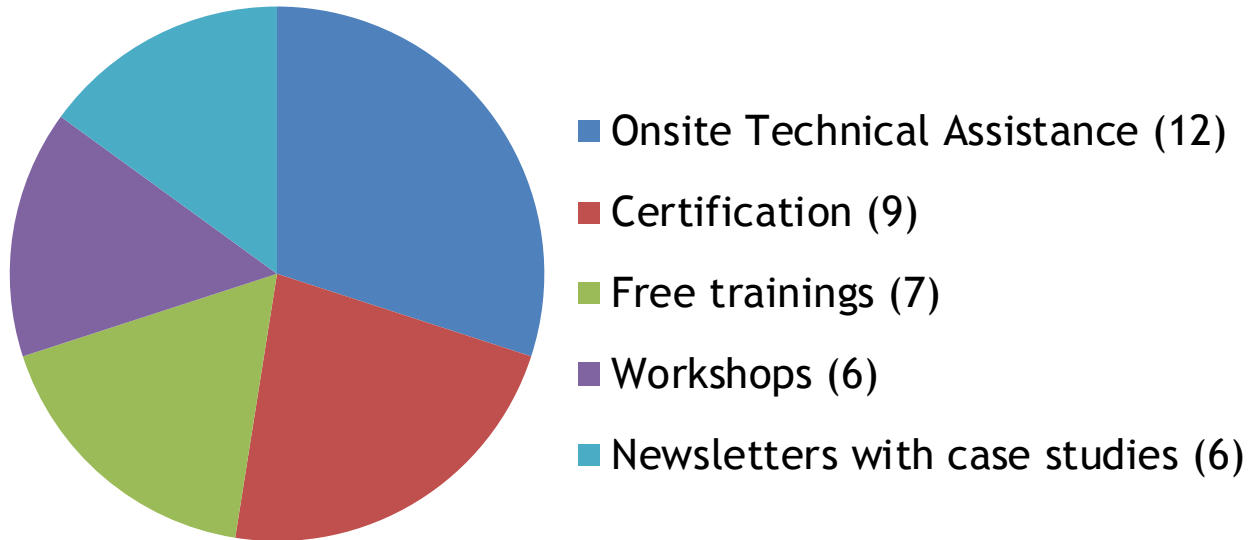
What would encourage you to participate?



What would prevent you from participating?



Outreach Strategy



1. **Advertise the Program:** meet people where they are and follow up with high-touch techniques
2. **Engage the Shops:** sell incentives and translate materials
3. **Encourage Compliance**
4. **Evaluate and Repeat**

An orange mousepad with a white logo. The logo features a stylized wrench on the left. To the right of the wrench, the words "GREEN WRENCH" are printed in large, bold, sans-serif capital letters. Below this, the words "TECHNICAL ASSISTANCE" are printed in a smaller, sans-serif font. At the bottom of the logo, the words "DEPARTMENT OF ENERGY & ENVIRONMENT" are printed in a very small font. The mousepad is placed on a dark wooden surface. A portion of a blue pen is visible on the right edge of the image.



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Stormwater runoff can carry harmful pollutants that impact the overall health of our rivers and waterways. By using good housekeeping techniques, mechanics can play an important role in minimizing stormwater pollution.



**THIS DRAINS TO YOUR
LOCAL WATERWAY**

KEEP IT CLEAN FOR DOWNSTREAM



Clean spills & leaks immediately using dry absorbents.

If you notice a leak, place a drip pan or dry absorbents down to catch the fluid.



Collect, store, and dispose of hazardous waste carefully and according to the Resource Conservation and Recovery Act (RCRA). Collect the waste separately for your hazardous waste hauler.



Protect outdoor items and storage from rain.

Parts and tires stored outdoors should be kept off the ground and covered to protect them from the rain.



Stop wash water from getting into storm drains and running into public spaces, like the street when hosing down equipment. Use a wet vacuum or spray-and-wipe cleaner instead.



Store containers of oil and other liquids in a second container to catch leaks and spills.

REPORT SPILLS AND LEAKS

Call 911 for Emergencies: This includes any amount of spilled product or sheen that enters a storm drain or water body.

Call (202) 535-2600 for non-emergencies: This includes spills and leaks of hazardous substance or oil that are able to be contained and cleaned up. Keep a record of the incident on site for at least three years.



DEPARTMENT
OF ENERGY &
ENVIRONMENT

doee.doc.gov/service/greenwrench



Language



- Save money
- Receive onsite consultations and training
- Protect yourself from harmful substances
- Fits into your schedule
- Attract customers



Free to all registered participants



Languages

- English
- Spanish (Español)
- Amharic (አማርኛ)

CBSM Strategies

Key Strategies

1. Commitment
2. Prompts
3. Social Norms
4. Communication
5. Incentives
6. Social Diffusion
7. Convenience

Program Elements

- Certification
- Poster of BMPs
- Case studies
- Newsletter, Workshop
- Money, recognition
- Multiple shops
- Onsite assistance



Measuring Success

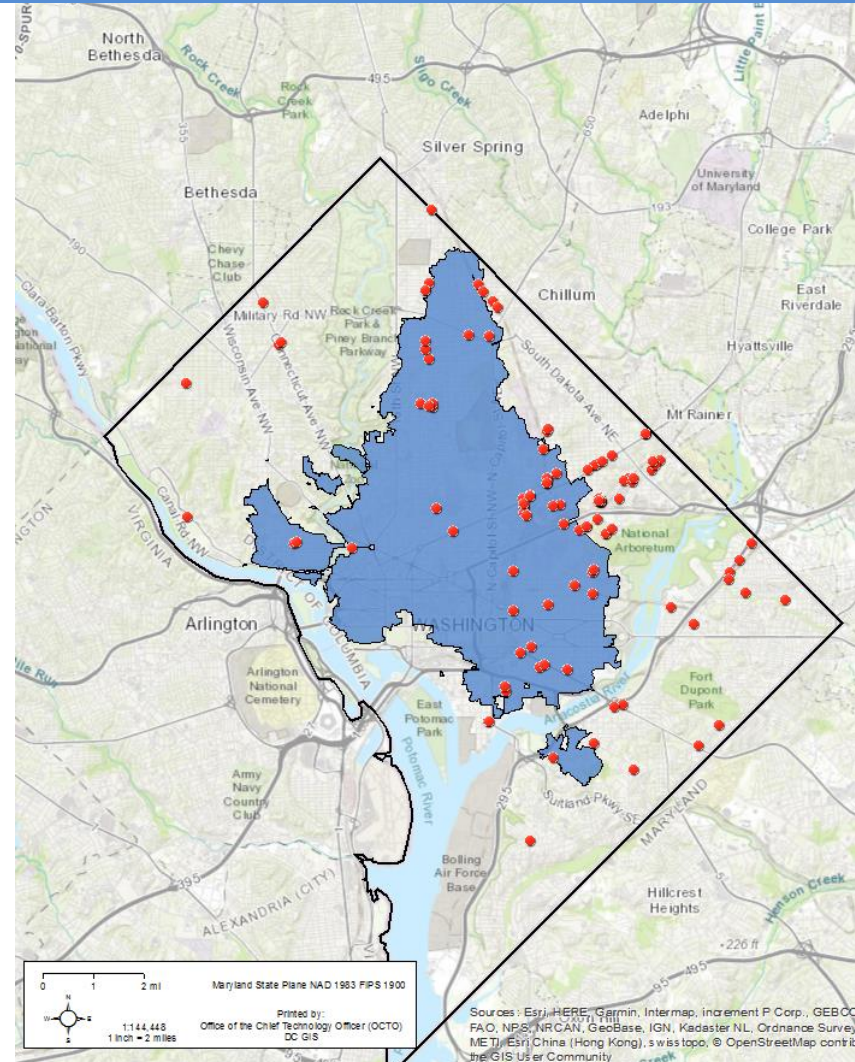
GreenWrench collects information to assess how effective the program is at reducing pollution

- Lbs hazardous materials
- MTCO₂e
- Gal water
- \$\$

Results

Roughly 9 Months Recruiting

- 70+ shops recruited in-person
- 20 facilities registered
- 2 workshops with about 25 attendees each
- Distrust of program
 - Free
 - Data collection
 - Owners vs. managers



Program Expansion

1. Continue GreenWrench
 - In-person visits to develop relationships and provide assistance
 - Measure program impacts
 - GreenWrench certification
2. Train students, who are studying to be mechanics
3. Encourage use of safer chemicals by having shops try out products



Safer Chemical Alternatives

Provide products to shops to test

- Safer for the environment
- Safer for human health



Project Activities, Outputs, & Deliverables

Activity	Outputs	Deliverables
Budget	1. A report on hours that employees and students spend on GreenWrench	1. Documentation of the number of hours
Technical assistance	1. New shops participate in the program 2. Site visits 3. Data on pollution reduced and money saved 4. 3-5 case studies	2. List of “partners” 3. Shop-specific P2 Plans for participating shops 4. Log that tracks the number and duration of onsite visits 5. Data on the amount of pollution reduced and money saved 6. Analysis of data 7. 3-5 case studies
Certification program	5. Shops are certified	8. Verified Certification worksheets 9. List of certified shops

Project Activities, Outputs, & Deliverables

Activity	Outputs	Deliverables
Educate Mechanic Students	6. Workshops or presentations for 200 students, with pre- and post- questionnaires	10. curriculum 11. Pre and post questionnaire 12. Sign-in sheets and completed pre/post surveys
Safer Chemical Alternatives	7. Safer chemical alternatives are provided to at least 10 shops for free 8. Shops try out and provide feedback 9. Report that summarizes feedback and discusses the potential environmental benefits and costs	13. Feedback on safer chemical products by participating shops 14. Report summarizing feedback, potential environmental benefits, and costs or cost savings

Hours Spent on the Program

Track how much time shop employees and students spend on the program. Convert into in-kind match

Goal: \$65,000

Example

	# Partners	Hours per partner	Total Hours	Hourly Wage	Total Match
Managers	12	6	72	\$ 44.00	\$ 3,168
Mechanics	12	10	120	\$ 28.00	\$ 3,360
Students	5	20	100	\$ 14.00	\$ 1,400
				Total \$	7,928

Review Process

1. Panel of reviewers
2. Each reviewer scores the applications using the scoring matrix
3. Meet to discuss scores and make a recommendation
4. 6 - 8 week process



Scoring

Scoring Criteria	Points
1. Reflects the ability to successfully develop and implement the GreenWrench Technical Assistance Program expansion.	5
2. Displays comprehensive knowledge of source reduction strategies for stormwater pollution, air pollution, hazardous materials, and energy use.	10
3. Shows comprehensive knowledge of land, air, and stormwater regulations that apply to District of Columbia automotive repair shops.	10
4. Provides strong evidence of the ability to recruit, retain, and build productive relationships with GreenWrench participants to achieve project goals.	15
5. Describes in-depth knowledge of and experience in providing technical assistance to automotive repair shops or similar businesses.	10

Scoring Criteria	Points
6. Demonstrates capacity to provide onsite technical assistance in languages other than English , especially Spanish and Amharic.	5
7. Illustrates a proficiency in effectively collecting and analyzing source reduction data .	10
8. Demonstrates ability to create reports and case studies that summarize data in a clear and comprehensive manner.	10
9. Describes ability to perform onsite technical visits throughout the District, including adequate administrative support, appropriate staffing levels, and sufficient transportation.	10
10. Presents an adequate and reasonable numeric budget and a clear and detailed budget narrative justifying the funds requested.	5
11. Presents a clear and detailed plan for tracking and reporting the time shop employees and students spend on GreenWrench, with the goal of translating in-kind hours into \$65,000 of matching funds.	10

How To Apply

Due Friday, January 25th at 4:30pm.

1. Deliver 5 hard copies of the application to DOEE:

District of Columbia Department of Energy and Environment

RFA - Grants

1200 First Street NE, 5th Floor

Washington, DC 20002

Attn: RFA 2019-1823-WPD

AND

2. Email pdf copy to GWE@dc.gov

Tip: Use checklist in Section 8

QUESTIONS?

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• 202-645-4231

doee.dc.gov/service/greenwrench